CLAIMS

What is claimed is:

1. A reusable aircraft, comprising:

a body having wings and a jet engine for sustaining flight and a compartment for carrying a payload, the body being configurable in a watertight configuration for immersion and buoyancy in sea water, and a flight configuration for operational use; and

a rocket detachably mounted to the body for providing lift-off for a sea-based launch from at least a partially submerged position, the rocket being disposable after launch; and

the body being reusable after flight with the jet engine.

2. The aircraft of claim 1, wherein the aircraft is unmanned.

3. The aircraft of claim 1, wherein the aircraft is void of conventional landing gear or floatation pontoons.

4. The aircraft of claim 1, wherein the body has an internal gas pressurization system to offset and balance external hydrostatic water pressure loads.

5. The aircraft of claim 1, wherein the jet engine has inlet and nozzle close-off doors with inflatable watertight seals.

6. The aircraft of claim 1, wherein the body has actuated doors with watertight inflatable seals.

7. The aircraft of claim 1, wherein manufacturing joints, seams, and airframe penetrations are treated with sealant and appliqué tapes for further enabling the watertight configuration.

8. A system for operating a sea-based aircraft without the need for a flight deck, comprising:

a submarine having a converted missile tube;

an aircraft storable in, deployable from, and retrievable to the missile tube of the submarine while the submarine is submerged, the aircraft having a jet engine, a payload, a watertight configuration such that the aircraft is impermeable to water, and a flying configuration for operation of the jet engine.

9. The system of claim 8, wherein the aircraft is unmanned.

10. The system of claim 8, wherein the aircraft is deployed from the submerged submarine into a body of water, and the aircraft is at least partially submerged in the body of water when beginning flight.

11. The system of claim 10, wherein the aircraft is propelled out of the body of water with rocket boosters and sustains flight with the jet engine.

12. The system of claim 8, wherein the aircraft utilizes the payload of the aircraft to attack a target with munitions and provide reconnaissance.

13. The system of claim 8, wherein the aircraft has no conventional landing gear or floatation pontoons and lands directly in the body of water.

14. The system of claim 8, wherein the aircraft is reusable after being refueled and refitted with another payload.

15. The system of claim 8, wherein the aircraft shuts down and provides a watertight seal for the jet engine before being recovered by the submerged submarine.

16. The system of claim 8, wherein wings of the aircraft are unfolded from a retracted storage position to an extended flying position, and the wings are folded from the extended flying position to the retracted storage position.

17. A method of operating a sea-based aircraft, comprising:

(a) equipping an aircraft with a payload;

(b) configuring the aircraft in a watertight configuration;

(c) storing the aircraft on a ship;

(d) releasing the aircraft into a body of water such that the aircraft is at least partially submerged in the body of water;

(e) propelling the aircraft out of the body of water;

(f) sustaining flight of the aircraft with a jet engine;

(g) utilizing the payload of the aircraft;

(h) landing the aircraft in the body of water; and

(i) retrieving the aircraft onto the ship.

18. The method of claim 17, further comprising refitting the aircraft with another payload and repeating steps (b) through (i).

19. The method of claim 17, further comprising returning the aircraft to a designated recovery point in the body of water and shuts down the jet engine prior to step (h).

20. The method of claim 17, wherein step (b) is repeated before step (h).

21. The method of claim 17, wherein step (h) comprises splashing down directly into the body of water.

22. The method of claim 17, wherein step (b) comprises using rocket boosters.

23. The method of claim 17, wherein step (g) comprises attacking a target with munitions and providing reconnaissance.

24. The method of claim 17, wherein step (d) comprises unfolding wings of the aircraft from a retracted storage position to an extended flying position, and step (i) comprises folding the wings from the extended flying position to the retracted storage position.

25. The method of claim 17, wherein steps (c) and (i) comprise using a submerged submarine.

26. The method of claim 25, wherein the aircraft is released from and retrieved into a converted missile tube in the submarine.